# TABLE 18

The table below presents a record of the differences between the February projection and the final Estimate. Using world wheat production as an example, the "root mean square error" means that chances are 2 out of 3 that the current forecast will not be above or below the final estimate by more than 0.6 percent. Chances are 9 out of 10 (90% confidence level) that the difference will not exceed 1.0 percent. The average difference between the February projection and the final estimate is 2.5 million tons, ranging from 0.0 million to 7.3 million tons. The February projection has been below the estimate 24 times and above 8 times.

**RELIABILITY OF PRODUCTION PROJECTIONS 1/**

| COMMODITY AND REGION | Root mean square error | 90 percent confidence interval | Difference between forecast and final estimate | | | | |
|---|---|---|---|---|---|---|---|
| | | | Average | Smallest | Largest | Years | |
| | | | | | | Below final | Above final |
| | Percent | | ---Million metric tons--- | | | | |
| ***WHEAT*** | | | | | | | |
| World | 0.6 | 1.0 | 2.5 | 0.0 | 7.3 | 24 | 8 |
| U.S. | 0.1 | 0.2 | 0.0 | 0.0 | 0.3 | 12 | 9 |
| Foreign | 0.7 | 1.1 | 2.5 | 0.0 | 7.3 | 24 | 8 |
| ***COARSE GRAINS 2/*** | | | | | | | |
| World | 1.2 | 2.0 | 8.8 | 0.0 | 26.0 | 26 | 6 |
| U.S. | 0.2 | 0.3 | 0.1 | 0.0 | 1.3 | 13 | 7 |
| Foreign | 1.7 | 2.8 | 8.9 | 0.0 | 26.0 | 24 | 7 |
| ***RICE (Milled)*** | | | | | | | |
| World | 1.6 | 2.8 | 4.3 | 0.1 | 14.0 | 24 | 8 |
| U.S. | 1.6 | 2.7 | 0.1 | 0.0 | 0.3 | 12 | 6 |
| Foreign | 1.7 | 2.8 | 4.3 | 0.1 | 14.0 | 24 | 8 |
| ***SOYBEANS*** | | | | | | | |
| World | 2.8 | 4.8 | 3.9 | 0.4 | 15.3 | 20 | 12 |
| U.S. | 1.4 | 2.3 | 0.6 | 0.0 | 2.5 | 14 | 12 |
| Foreign | 4.8 | 8.1 | 3.9 | 0.3 | 14.8 | 21 | 11 |
| ***COTTON*** | | | *---Million 480-lb. bales---* | | | | |
| World | 2.3 | 3.9 | 1.7 | 0.0 | 5.4 | 24 | 8 |
| U.S. | 0.9 | 1.6 | 0.1 | 0.0 | 0.3 | 12 | 19 |
| Foreign | 2.8 | 4.8 | 1.7 | 0.1 | 5.7 | 24 | 8 |
| **UNITED STATES** | | | *-------Million bushels-------* | | | | |
| *CORN* | 0.2 | 0.3 | 3 | 0 | 41 | 2 | 2 |
| *SORGHUM* | 0.2 | 0.3 | 0 | 0 | 4 | 0 | 2 |
| *BARLEY* | 0.5 | 0.9 | 1 | 0 | 11 | 12 | 4 |
| *OATS* | 0.2 | 0.4 | 0 | 0 | 2 | 4 | 3 |

1/ Marketing years 1981/82 through 2012/13. Final for grains, soybeans and cotton is defined as the first November estimate following the marketing year for 1981/82 through 2012/13.

2/ Includes corn, sorghum, barley, oats, rye, millet, and mixed grain

February 2014 Office of Global Analysis, FAS, USDA